In the Claims:

Please amend the claims as follows:

1. (Withdrawn) A method of treating a mammal having a disorder of cholesterol metabolism comprising administering to said mammal a therapeutically effective amount of a compound that modulates the biological activity of ABCA1 polypeptide.

2. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* lipid transport across a membrane.

3. (Withdrawn) The method of claim 2, wherein said lipid is a member selected from the group consisting of phospholipid and cholesterol.

4. (Withdrawn) The method of claim 2, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

5. (Withdrawn) The method of claim 2, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

6. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* ion transport across a membrane.

7. (Withdrawn) The method of claim 6, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

8. (Withdrawn) The method of claim 6, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

9. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* interleukin-1 transport across a membrane.

10. (Withdrawn) The method of claim 9, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

11. (Withdrawn) The method of claim 9, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

12. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* ATP-hydrolysis.

13. (Withdrawn) The method of claim 12, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

14. (Withdrawn) The method of claim 12, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

15. (Withdrawn) The method of claim 1, wherein said biological activity is *in vitro* ATP-binding.

16. (Withdrawn) The method of claim 15, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

17. (Withdrawn) The method of claim 15, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

18. (Withdrawn) The method of claim 1 wherein said mammal is a mouse.

19. (Withdrawn) The method of claim 1 wherein said mammal is a human.

20. (Withdrawn) The method of claim 1, wherein said mammal has low HDL cholesterol levels relative to normal.

21. (Withdrawn) The method of claim 20 wherein said mammal is a mouse.

22. (Withdrawn) The method of claim 20 wherein said mammal is a human.

23. (Withdrawn) The method of claim 1 wherein said modulation is an increase in biological activity.

24. (Currently Amended) A method to increase plasma HDL-C in a human, comprising administering to said human a compound ~~an agent~~ that increases ABC1 lipid transport activity by binding to an ABC1 polypeptide or a gene expressing said ABC1 polypeptide in cells of said human and wherein said agent is administered in an amount that increases by at least 10% the level of ABC1 lipid transport activity in said cells, wherein said cells are selected from fibroblasts and macrophages, wherein said lipid is phospholipid or cholesterol and wherein said agent that binds to said gene is an agent that binds to an ABC1 promoter sequence of said gene to increase expression of said polypeptide.

25. (Previously Presented) The method of claim 24, wherein prior to said administering said human has plasma HDL-C less than 0.9 mmol/l.

26. (Currently Amended) The method of claim 25, wherein said lipid is ~~a member selected from the group consisting of phospholipid and~~ cholesterol.

27. (Currently Amended) The method of claim 24, wherein said lipid is ~~a member selected from the group consisting of phospholipid and~~ cholesterol.

28. (Canceled)

29. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* ion transport across a membrane.

30. (Withdrawn) The method of claim 29, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

31. (Withdrawn) The method of claim 29, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

32. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* interleukin-1 transport across a membrane.

33. (Withdrawn) The method of claim 32, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

34. (Withdrawn) The method of claim 32, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

35. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* ATP-hydrolysis.

36. (Withdrawn) The method of claim 35, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

37. (Withdrawn) The method of claim 35, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

38. (Withdrawn) The method of claim 24, wherein said biological activity is *in vitro* ATP-binding.

39. (Withdrawn) The method of claim 38, wherein said ABCA1 polypeptide comprises the amino acid sequence of SEQ ID NO: 1.

40. (Withdrawn) The method of claim 38, wherein said ABCA1 polypeptide comprises amino acids 1-60 of SEQ ID NO: 1.

41-45. (Canceled)

46. (Withdrawn) The method of claim 1 wherein said disease is selected from the group consisting of Alzheimer's disease, Niemann-Pick disease, Huntington's disease, x-linked adrenoleukodystrophy, and cancer.

47. (Withdrawn) The method of claim 46 wherein said mammal is a mouse.

48. (Withdrawn) The method of claim 46 wherein said mammal is a human.

49. (Previously Presented) The method of claim 24, wherein said human has a cardiovascular disease selected from the group consisting of coronary artery disease, cerebrovascular disease, coronary restenosis, and peripheral vascular disease.

50. (Withdrawn) A method of preventing cardiovascular disease in a human, said method comprising administering to said human an expression vector comprising an *ABCA1* polynucleotide operably linked to a promoter, said *ABCA1* polynucleotide encoding an ABCA1 polypeptide having *in vitro* ABCA1 biological activity.

51. (Withdrawn) A method of preventing or ameliorating the effects of a disease-causing mutation in an *ABCA1* gene in a human, said method comprising introducing into said human an expression vector comprising a promoter operably linked to an *ABCA1* polynucleotide encoding an ABCA1 polypeptide having *in vitro* ABCA1

biological activity.

52. (Withdrawn) A method of treating or preventing cardiovascular disease in an animal, said method comprising administering to said animal a compound that mimics the activity of wild-type ABCA1.

53. (Withdrawn) The method of claim 52, wherein said animal is a human.

54. (Withdrawn) The method of claim 52 wherein said compound is a member selected from a group consisting of protein kinase A, protein kinase C, vanadate, okadaic acid, IBMX1, fibrates, γ-estradiol, arachidonic acid derivatives, WY-14,643, LTB4, 8(s)HETE, thiozolidinedione antidiabetic drugs, 9-HODE, 13-HODE, nicotinic acid, HMG CoA reductase inhibitors, and compounds that increase PPAR-mediated ABCA1 expression.

55. (Withdrawn) The method of claim 52, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or peripheral vascular disease.

56. (Withdrawn) The method of claim 53 wherein said compound is a member selected from a group consisting of protein kinase A, protein kinase C, vanadate, okadaic acid, IBMX1, fibrates, γ-estradiol, arachidonic acid derivatives, WY-14,643, LTB4, 8(s)HETE, thiozolidinedione antidiabetic drugs, 9-HODE, 13-HODE, nicotinic acid, HMG CoA reductase inhibitors, and compounds that increase PPAR-mediated ABCA1 expression.

57. (Previously Presented) The method of claim 25, wherein said human has a cardiovascular disease.

58. (Previously Presented) The method of claim 57, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or

peripheral vascular disease.

59. (Previously Presented) The method of claim 25, wherein said human is at risk of developing a cardiovascular disease.

60. (Previously Presented) The method of claim 59, wherein said cardiovascular disease is coronary artery disease, cerebrovascular disease, coronary restenosis, or peripheral vascular disease.

61. (Previously Presented) The method of claim 58, wherein said cardiovascular disease is coronary artery disease.

62. (Canceled)

63. (Previously Presented) The method of claim 24, wherein said increase in ABC1 lipid-transport activity is at least 25%.

64. (Previously Presented) The method of claim 24, wherein said increase in ABC1 lipid-transport activity is at least 50%.

65. (Previously Presented) The method of claim 24, wherein said plasma HDL-C is increased by at least 25%.

66. (Previously Presented) The method of claim 24, wherein said plasma HDL-C is increased by at least 50%.

67. (Previously Presented) The method of claim 24, wherein said cells are fibroblasts.

68. (Currently amended) The method of claim 24, wherein said cells are macrophages ~~fibroblasts~~.